

ABSTRACT OF THE DISCLOSURE

A composite fiber-resin structural member includes a composite fiber-resin tube having a central axis, and an elongated truss. The truss has a longitudinal axis and includes at least two wires and a plurality of diametral carbon fibers which forms circular bundles around the wires. The truss fits within the fiber-resin tubing such that the central axis of the fiber-resin tubing and the longitudinal axis of the truss are coaxial. The diametral fibers are connected to the fiber-resin tubing with resin, and are of substantially equal length from the longitudinal axis of the truss. Preferably, at least one of the wires of the truss is mechanically textured to include a consistent and repeating distortion along at least a portion of its length.